

ABSTRACT OF THE DISCLOSURE

Disclosed is a system and method for determining a transmission power in a radio packet data transmission system on the basis of the transmission power at the previous packet transmission. A preferred method includes: a step for calculating the transmission power; a step for transmitting a Preamble to the base station with the calculated transmission power; a step for receiving a channel occupying signal from the base station as a response to the preamble; and a step for transmitting packet data after the channel occupying signal is transmitted and ending the packet data transmission process if the transmission is successfully made. The system and method advantageously reduce the amount of time required to transmit subsequent packets of data at more optimal power levels.